

**SOURCE INVENTORY**  
**CATEGORY # 46**  
**RUBBER PRODUCTS MANUFACTURING**

**1999 EMISSIONS**

*Introduction*

Emissions from this category are from rubber fabrication industry, including vulcanizing, where raw rubber is compounded by additives and formed into desired shape and cured at required temperature. In the forming steps, large amounts of organic solvent are often used and therefore included in the emissions in this category.

*Methodology*

Throughput information of each source is reported by individual companies and stored in the District's Data Bank System. These Point Source emissions are calculated by using data from a particular source operation and emission factors based on tests and other data publication. If no specific factor is available, a generalized factor is used developed by district staff engineer. Total rubber products production was estimated based on U. S. Department of Commerce "Current Industrial Report on Rubber Products". In 1999, it was estimated 19,382 tons were used by other area sources not otherwise reported, or part of the District Data Bank system.

The organics emission factor was estimated based on AP-42, for emulsion styrene-butadiene copolymer production. Emulsion latex polymerization is done in batch process, hence smaller usage than emulsion crumb polymerization. An emission factor of 7.54 lbs./ton was derived.

Calculation : ( Area Sources ):

$$\begin{aligned}\text{Emissions} &= 19,382 \text{ tons/yr} \times 7.54 \text{ lbs./ton} / 2000 \text{ lbs./ton} / 365 \text{ days/yr} \\ &= 0.20 \text{ ton organics/day}\end{aligned}$$

*Monthly Variation*

Monthly distribution was estimated based on cyclic production of rubber products industry, and is reported by each company's quarterly percent throughput.

*County Distribution*

The population of each county was used to distribute emissions into each county.

## **TRENDS**

### *History*

Prior years' emissions estimated based on ARB's Rubber Manufacturing Industry growth profile. This growth profile was modified to reflect District emissions data between 1990 - 1999

### *Growth*

Projections to year 2030 were also based on ARB's Rubber Manufacturing Industry growth profile.